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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/031,196 | 06/24/2002 | Hans-Joachim Felkl | A34882-PCT-USA | 6298 |
| 21003 | 7590 | 01/07/2004 | EXAMINER | |
| BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | GOETZ, JOHN S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3725 | |
| DATE MAILED: 01/07/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,196

Applicant(s)

FELKL ET AL.

Examiner

John S. Goetz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/30/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment has been received and entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC §103

3. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silva (3,820,365) in view of Kain.
4. Silva discloses a method for rolling a metal strip in a skin-pass rolling stand comprising:
 - i. setting the entry velocity of the metal strip and the exit velocity of the metal strip independently of the strip tension (see column 1, lines 37-40 and column 4, line 4);
 - ii. setting the roll nip as a function of strip tension upstream of the rolling stand (see abstract, third sentence – stating “constant delivery tension” and column 3, lines 30-43).

Silva lacks only setting the roll nip as a function of both upstream and downstream tension.

Kain, however, in the apposite art of rolling mills, discloses a method of controlling the roll nip or “working member” (see page 2, lines 43-44) as a function of “output signals from the measuring means upstream and downstream of said member” or roll nip (page 1, lines 74-77).

Further, Kain discloses that said measuring means are used to measure a strip parameter (page 2, line 46) and that one such parameter is the strip “tension” (page 2, line 87). Finally, Kain discloses that such a “feed forward” control system allows for “better agreement with the desired

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dimensions of the material after the working process” (page 1, line37-39). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the skin-pass rolling method of Silva with a means for setting the roll-nip as a function of upstream and downstream strip tension in order to increase the accuracy of the final strip dimensions, as suggested by Kain.

5. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silva and Kain, as applied above, further in view of Prigent.

6. Claims 2-5 add various ranges of the strip thickness and setting the exit and entrance velocities of the strip “by the ratio” of the exit thickness to the entrance thickness. Prigent discloses a method of controlling an rolling stand where the thickness is reduced from 0% to 10%, which covers the ranges of claims 2 and 3. Additionally, with respect to claims 4 and 5 Prignet discloses setting the exit and entrance velocities of the strip “by the ratio” of the exit thickness to the entrance thickness (see translation page 3, first full paragraph). Finally, Prignet discloses that this allows for the instantaneous correction of rapid variations in the strip thickness (page 2, fourth full paragraph). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rolling method taught by Siva and Kain with the various ranges of the strip thickness and setting the exit and entrance velocities of the strip “by the ratio” of the exit thickness to the entrance thickness in order to more precisely and quickly control the strip thickness, as suggested by Prignet.

7. Claims 6-7 add correcting the entrance velocity as function of the measured entrance and exit velocities and as a function of the “temporal mean” of the exit and entrance velocities.

These limitations are the functional equivalent of the Kain reference operations as described above. Thus, these claims are obvious for the same reasons as claim 5, from which they depend.

Response to Arguments

8. Applicant's arguments with respect to claims 1-7 and 9 have been considered but are not persuasive.

9. In response to applicant's argument that Kain and Prigent are is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the rolling stands taught in both Kain and Prignet are both in the field of the applicant's endeavor, rolling metal strip, and pertinent to the problem with which the applicant was concerned, controlling strip parameters in order to achieve a more precisely formed strip. Additionally, it is noted that the newly cited Silva reference is drawn to "[t]emper or skin-pass rolling of strip" (column 1, line 5).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period


will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Goetz whose telephone number is 703-308-1411. The examiner can normally be reached on Mon, Tues, Thurs, Fri 7:00am-5:30pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on 703-308-3136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3136.

JSG


ALLEN OSTRAGER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700